HINTS ON

RUPTURE AND TRUSSES,

AND

REMARKS ON INSTRUMENTS,

For the Relief of Deformity,

BEING A GUIDE TO THOSE WHO REQUIRE THE AID OF THE SURGICAL MACHINIST,

BY

ROBERT BRUCE,

Surgeons' Anatomical Instrument and Bandage Maker,

No. 145 LOMBARD ST.,

BALTIMORE.

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PRINTED BY FREDERICK A. HANZSCHE

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PREFACE.

The following short treatise is not meant to throw light upon any particular branch of the Medical Science, but is merely a few useful hints and remarks for the information of those who may be afflicted with Rupture, or any other disease or deformity to which mechanical means are applied.

Such a little work was suggested to the author, first by several medical friends in Glascow, Scotland, and more recently by his many medical friends of Virginia and Maryland. They were of opinion that such a guide would be of service to persons in want of the aid of the Surgical Machinist; and that by exposing the practices of those unqualified for such a profession, prevent much uneasiness to the medical attendant, and much danger and useless expense to the patient.

That such a guide was wanted, none who have paid any attention to the subject will deny. In every town, truss and bandage makers are springing up, devoid of principle, making false pretentions and devices to allure the unsuspecting into their hands; and the person so unsuspecting as to trust to such empirics, may be thankful if only money has been uselessly thrown away. The members of the medical profession are well aware of the injuries that have been sustained by patients from maltreatment, by the application of instruments wrongly constructed, and applied by ignorant pretenders. The writer was early trained to all the minutiæ of the practical part of the business, in the establishment of his father-in-law at Glascow, Scotland, carried on under the firm of Marrison & Edwards, who were the orig-

inal Truss and Bandage makers of that city, and from whom such a host have sprung, and well known to the medical profession for forty years, and till this date both in Europe and America.

Being desirious of bringing the business to as much perfection as possible, he underwent a course of studies, by which he became familiar with the anatomy and surgical relations of the different parts of the body, paying particular attention to the parts connected with Hernia, and the different forms of deformity. He was enabled to see that much ignorance was shown even by the most popular machinists, and to a deplorable extent by the general mass of pretenders. He has no wish to be thought a medical man, but simply one who being practically a mechanic, has made himself familiar with the different forms of disease, and by such qualifications he hopes to be of service to suffering mankind, and raise this branch from the depths to which it has been sunk by those who have no other qualifications than having been bred hammermen, saddlers or staymakers.

HINTS ON RUPTURE AND TRUSSES.

Hernia or Rupture.

Is the name applied to tumor formed by a descent or protusion of intestine. It generally appears in the groin, and lower parts of the abdomen. It may occasionally disappear for a short time, and generally does so, when in a reclining position. It is often attended with little or no pain at first, and varies in size and contents in different individuals. The individual often thinks that it is merely a small swelling, which will disappear in a day or two, and neglects obtaining advice, until its bulk, or the pain attendant, forces him to consult his physician or surgeon. Others, from a feeling of delicacy, do not get advice, but hasten to some shop where trusses are sold, buy one and think they are quite safe; which course often leads to painful results. The only wise and prudent plan is to consult a medical man, and, if ruptured, the party will of course be told to get a truss; and if a proper truss be applied, little inconvenience if any, will be felt from the rupture. Too much caution cannot be employed in the choice of a truss-maker, as it is disgraceful but true, that many who have no other qualifications but a claim to the anvil and awl, profess truss-making. So general has the sale of trusses become, that they are found in the shops and windows of hardwaremen, tinmen, and toy-dealers. These trusses are made in factories by men who like their employers, may have heard of such a thing as rupture, but are entirely ignorant

as to what it is, and that there are more kinds than one. Travellers are sent round about the country, who sell them in conjunction with knives, scissors &c. The shop-keeper is induced by the representations of the traveler, to take a few dozen on trial, thinking they will be a profitable article for sale. He is told that the springs are warranted and strong, this is thought a proof of superior quality. Every medical man is aware that strong springs in some cases are very injurious. These trusses, with the exception of size, are made all alike, and are, from the very nature of their construction, unsuitable for any description of rupture. It is sad to think of the results of such a traffic; cases are daily happening of trusses being applied where no rupture exists, causing great pain and danger to the wearer.

All the information which the seller requires concerning the rupture, is the size round the body; he does not know that a truss to suit one kind of rupture, would be injurious to another. His trusses are all alike, except in size; and he thinks he does quite right if he gives one the size. As there are different kinds of rupture, differing in position, size and course of descent or protrusion, it must be obvious to every one that no particular kind or shape of truss can reasonably be applicable to all. Truss-making has been too much abandoned to mechanics of the lowest class, who from some disqualification do not succeed at their original trade; they manage to get employment from some person of standing and soon after set up for themselves. A man to be a truss-maker must be qualified by being a mechanic, and possessing a knowledge of the anatomy of the parts connected with rupture; if such be the case, he can practise his profession with benefit to mankind and satisfaction to himself. If every truss maker and

vender were so qualified, the medical man would be saved much unnecessary trouble and uneasiness, and the ruptured community, from much pain and danger.

I will now endeavor to make the different kinds of rupture as plain and intelligible as possible, without going to that depth, which to any except the medical student, must be confusing instead of beneficial.

Oblique Inguinal Hernia is the most frequent kind, and receives its name from its descending obliquely through the inguinal canal, or the passage through which the spermactic vessels pass out of the abdomen to the serotum: the same rupture descending into the scrotum, is called Scrotal Hernia. This kind of rupture is at first generally easily reducible. Some persons feel no pain from it, and allow it to go on increasing, until the serotum is swelled to such an extent that the weight and bulk demand assistance. A truss to act properly for this kind of rupture, should not, as is generally supposed by truss-makers press on the bone of the pube, but higher up, so as if possible prevent the rupture from lying in the canal. Pressure on the bone is dangerous as well as painful.

Direct Inguinal Hernia is of more rare occurrence, and shows itself at the same part of the groin as the other; it protrudes directly through, not descending like the other. A truss to suit this kind, must act a little differently from the other.

Femoral Hernia generally shows itself suddenly at the bend of the thigh. It descends through the passage formed for the transmission of the vessels of the thigh. After descending, it moves up a little, and is worse to reduce than the preceding. It is also attended with more pain. It is of more fre-

quent occurrence in females than in males. It must be evident that a truss to suit this kind, must be of a different construction from those for inguinal rupture. Notwithstanding this trusses are daily applied promiscuously to all kinds.

Umbilical Hernia shows itself at the navel, and is found oftener in women and children than in men. It is generally easily reducible, and by a properly fitting truss, can be easily kept from protruding. A truss for this kind is of course of an entirely different construction.

Congenital Inguinal Hernia occurs in infants, and shows itself soon after birth; it requires great attention on account of its connection with the testicle. Improper treatment is often productive of very serious injury. In all cases the medical man ought to decide whether a truss should be applied or not; and if the parts are in such a condition as to be benefited by the application of a truss, it will require great nicety to make it fit properly, without any chance of being injurious.

Rupture happens occasionally at other parts than here enumerated, but as this short treatise is only meant to give a superficial glance at the most common kinds, I will not enter into a detail of them.

Rupture may be produced by sudden exertion, such as jumping, lifting a heavy weight, a violent cough and sometimes in children by crying; it may be produced by a person returning to work after having been confined by illness for sometime, and exerting himself while still debilitated, and by many other causes; it often comes on so gradually that no cause can be given for it whatever, as the individual may not be aware for sometime that he has a rupture.

A radical cure may be effected in children if care be taken to have a proper truss and to wear it regu-

larly; if not worn regularly, however suitable the truss may be, a cure cannot be effected. In this respect parents cannot be too particular. In washing the child, the finger can be placed over the aperture so as to prevent the rupture from descending and the truss applied immediately after. In young children the truss should have two or three extra calico covers, or to be covered with silk oil-cloth, so as to preserve the spring by keeping it dry.

In adults, the cure is seldom attempted; after a truss is worn for sometime, the rupture may not descend, but it is not safe to leave off the truss, as the rupture will likely appear again, though not always so. Properly fitting trusses are worn with ease, and it is little or no inconvenience to wear one. Individuals ruptured, who are fond of bathing, should be provided with a truss to be worn while so occupied. Bathing-trusses should be as near as possible in color to the skin, so that they may be scarcely observable.

Rupture frequently happens on both sides, but the one may, as is often the case, be of a different description from the other. A tumor may also exist on the same side, and lying near to the rupture. The pad of the truss for such a case must be made with a cavity in it, for the reception of the tumor, and of such a shape as to keep the rupture from escaping without pressing on the other swelling. It is not unfrequent to see swellings, not ruptures, treated as ruptures, by having a truss applied by some unskilful truss-maker.

It is hoped that these few general ideas will be of service to individuals afflicted with rupture, by making it evident, that as ruptures vary, so must trusses, and kinds of trusses; also that no particular truss or patent can be equally answerable to every

description of rupture. Any scientific truss-maker will not confine himself to one kind of truss, but will on seeing the case make such an instrument as he thinks will suit in every respect. A truss to suit a lady, would not do equally well for a laborer, with a rupture to the same extent; nor would a truss to suit a gentleman engaged in an office suit a sailor or soldier equally as well. There can be no precise plan of making trusses, but they should vary according to circumstances. The physician does not in every case of similar disease prescribe exactly the same quantity of a particular medicine, but uses his discretion as to how much. In truss-making the same discretion can be used, and to great advantage.

The truss-maker should see the case if convenient, and if not, as good a description of the rupture as possible should be sent, with size round the body. The truss should be worn regularly, and only taken off while in bed, and put on before getting out of bed again. Few ruptures descend while in bed; but if so, a night or sleeping truss should be worn. I will now conclude my remarks on trusses, and it is hoped that they will be of service to those who have to wear them, if so the desired object will be gained, and the writer fully compensated.

TRUSSES FOR PILES.

I would call attention to my invention of truss for the distressing and disagreeable disease of *Piles*, as one granting instant relief to the patient as well as affording him every ease in walking or riding.

SPINAL COMPLAINTS.

Much has been said and written, against what is termed Steel Stays. I have read several treaties condemnatory of them, from which it appeared evident that a wrong idea of the plan of action of a properly constructed machine had been formed. All screwing up and bandaging of the body in them was condemned. This is quite in accordance with reason. But an instrument, or spine stay, constructed on scientific principles, will not act, as is often thought by twisting and screwing up the body. Such a plan is highly injurious, and no enlightened man would either practice or countenance it. That there are many instruments made, styled spine machines and stays, which look like a saddle, and act more as a dragging weight than a support, cannot be denied. But as long as hammermen and saddlers of the lowest description, who have no other qualification than having been employed in some menial capacity in an establishment where spinal instruments are made, are employed by the unwary, such instruments will be found.

It is lamentable to think what ignorance pervades the majority of those who profess to make such instruments. I know several of them, who, by some means or other, fell in with an old pair of stays. These were stripped of leather, and kept for patterns for the men to make others by. I have often seen stays which were aiding the disease rather than counteracting it, and of such a weight, that the individual has actually been unable to "carry them when on for any length of time." That there are numerous individuals who have been

greatly benefited by the support given them by a proper instrument, many medical men can affirm. There are also many diseases of the spine, to which mechanical aid would be of no use, but on the contrary injurious. The great aim of the stay is, or ought to be to give support—to raise the weight off the part affected, and bring the body as near as possible to the proper position. This can be effected without compressing the chest or abdomen. By being light, and acting properly and not hanging on the body, instead of them being felt as an incumbrance, the reverse is the case, as relief and ease are felt. The lever principle is allowed by prominent medical men to be the best, and that which gives relief sooner than any other. Of late it has been recommended by several of the most eminent surgeons of England, Scotland and France, likewise by a great many distinguished professors of these United States. The plan of action is scientific, and the weight is much less than the other kinds. Within these few months I have made several, and the results are highly satisfactory. I would recommend none to get any instruments for the relief of spinal disease without the concurrence of their medical adviser.

Such a course is prudent and safe. As I have before stated, in some cases the application of any instrument might be and frequently is injurious. Medical men differ much in their opinion as to the treatment of the spine. Many of high character have recourse to mechanical means, and others as prominent have not. In all cases the advice of an eminent physician or surgeon ought to be obtained, and acted upon. I might communicate many cases where benefit was obtained by the application of mechanical aid, but the following will suffice.

A gentleman called, and said he had a son, who was afflicted with a severe curvature of the spine. He had been recommended by a physician to get me to make some machine to relieve him. On visiting and examining the boy, I found the spine curved to the right, inclining from the middle of the neck to the centre of the back, or from the centre of the cervical vertebræ to the centre of the dorsal. There was also a considerable projection backwards. The boy could not walk, unless by supporting himself by placing his hands on his thighs. To attempt to cure this was out of the question. An instrument was planned to give support without compressing. When nearly finished I received orders not to proceed, as another medical man had said steel stays would be injurious. The child got weaker, and the parents went to reside in the country, to try if a change of air would be of benefit. The resident physician there saw him, and thought spine supporters would be of the greatest service to him, and recommended them to apply to me for them. The child was brought to town, and got the supports properly fitted. At that time he was pale and sickly, and could scarcely stand. In a short time he joined in the amusements of the other children, and daily gained strength. It is three years since he got them, and he is now considerably taller, healthy looking, and has not been confined a day on account of his health since. The curvature has not increased, and, as he has grown considerable, is not so prominent. All that was attempted was done, viz: to take the weight off the part affected, and to raise the body as soon as possible to its proper position, without screwing up or forcing.

A similar case of curvature occurred in a boy

about the same age, the son of a gentleman in the country. The boy was boarded with a lady in town. In consequence of the deformity in his spine, he was very weak, and was confined to the house. The family adviser, an eminent surgeon, ordered me to make a support or stay that would lift the weight off the part affected without compressing; this was done, and like the preceding, he has grown a good deal, and his general health is as good as that of any of his playmates.

Another, was a boy about ten years of age, with slight lateral curvature. A spinal stay was made and approved of. He wore the stay for about two years; by that time he had grown, and the curvature had disappeared. This happened before the preceding. He is now a well-formed and strong-looking young man, and is captain of a merchantman.

Numerous instances might be quoted, as I am repeatedly making such machines, and have been engaged longer, and if not more extensively, at least as much so as any in the United States. But it is considered useless, I have many with liberty to refer to, and the selection made is deemed sufficient.

That many cases of curvature can be benefited by the application of proper mechanical aid, is evident from the proofs of the patients themselves, and from the fact, that such aid is had recourse to by gentlemen of high standing in the medical profession. Encasements of steel and tight bandaging must be avoided. No fixed rule should be laid down for the particular shape, but modifications made, as the case may require.

If mechanical means are thought to be of benefit by the physician who is consulted, great care should be made in the choice of the machinist, as it must

be plain, that all depend on the suitableness of the construction for the case, and of its acting in such a manner as to have a tendency to check the distortion.

I will not extend these remarks as they are meant to be strictly general, and not an attempt to throw any additional light on this department of medical science.

DISTORTION OF THE FEET, &c.

Club feet of children, in most cases, can be effectually cured, by an application of proper bandages.

During the last sixteen years in this city, I have cured many children, who are now free from any deformity. Failures may, and often do arise, by the carelessness of after-treatment, also from instruments not being properly constructed or adjusted.

The cure can be effected without injury to the foot or leg, as proof can show. Great care in the construction of the instrument, and a knowledge of the anatomy of the foot and leg, is requisite to effect this.

Medical men have often recourse to the division of tendons in deformity of feet and legs. Several eminent in the profession in this country and Europe, have devoted much time to this subject, and their efforts have often, though not always, been attended with success. In older cases of club-foot, the division of tendon or tendons, as the case may be, is necessary.

In young children, under three years of age, cures by the use of bandages have often been made. It is pitiable to see many attempt to make proper bandages for the cure of club-feet, who are quite incompetent for the task, and care little for the result, so they get their money. Many make bandages all

alike, no matter what may be the extent or kind of deformity. The greater part are so made as to act in confirming the distortion. The parents are put to expense, time is wasted, and the foot is made no better. Then it is frequently too late even for the operation to do good. Parents if recommended by their physicians to get bandages should be cautious to whom to apply for them. The foot should be dressed, and the bandage shifted every two or three weeks by the maker; on the proper application all depends, and the parents or nurse should be made quite familiar with the plan of putting the bandage on, before doing it themselves. Failures often happen from a want of attention in this respect. No man of character should attempt to make bandages who is not familiar with the anatomy of the parts deformed, and who is not competent to attend sufficiently to the after-adjustments.

Surgeons after the operation, apply different kinds of bandages to keep the limb in its proper position for sometime. Several surgeons have a peculiar construction of their own.

Knees, drop-ancles, and many other deformities, can be treated successfully at a much later age than club-foot. All bandages should be constructed on as light a principle as possible, and should not act by pinching the feet and legs, hurting the action of the muscles, &c., but ought to act as much as possible by lever. It is astonishing to see persons advertising amongst other bandages, leg irons for sale. Indeed these leg irons are oftener more like manacles than any thing else. It is absurd to keep them ready, as every case requires a special construction. If such is not the case the individual would be much better without them, as no good can be done, but probably injury.

It is not my intention to enter into a list of cases, as it is well known that cures by "proper mechanical aid" have been effected, and are being effected. Parties should not without the consent of their medical adviser get any instrument, as he must be the best judge whether it will be of benefit or not.

VARICOUS VEINS, WEAK LEGS, &c.

It is now generally allowed by medical men that the Elastic Lacing Bandages are in every respect superior to the common rolling bandage; as their use is now generally well known, it is needless to enter into a detail of all the complaints in which they are of service. As it is not imperative that the individual should wait personally on the maker for a plan of measurements to be taken, see plate.

It would extend these pages to a much greater length than is thought requisite to enter into a detail of all the numerous articles made for the relief and sustainance of the human frame. I will therefore only add a list of a few:

Accouchement Belts are of the greatest service before and after confinement. Several eminent physicians have given it as their opinion that no lady should be without one. Personal attendance is not necessary.

Inclined Planes are of great service in treatment of spinal complaints.

Spring Crutches, much preferable to the common crutch.

Suspensory Bandages, of great service in riding, and disease of the scrotum, &c.

Abdominal Supporters, are of the greatest utility for weakness or falling of womb, giving to the patient not only support in this distressing disease

but at the same time affording great comfort and ease.

STEEL SUPPORTERS, (Triggups) are especially recommended for Stiff, Weak, Inflamed or Contracted Limbs, which will greatly facilitate the patient to walk, and with great ease, without any support from crutches or canes.

DANIEL'S PATENT OBSTETRICAL SUPPORTER. Having obtained the right to manufacture and sell in this city, *Daniel's Obstetrical Supporter*, I would respectfully beg leave to recommend it to the notice of the medical faculty.

SPLINTS, ARM SLINGS, STRAIGHT JACKETS, &c., &c.

ARTIFICIAL LEGS, ARMS, HANDS, HOSPITAL PIN LEGS, &c.

In conclusion permit me to refer to the following recommendatory letters respecting the several articles made by me, for the relief of those afflicted with the painful and distressing diseases, etc., treated upon in this small work.

RECOMMENDATORY LETTERS.

BALTIMORE, *Nov.* 21*st*, 1854.

DEAR SIR:—It gives me much pleasure to add my testimony in favor of your surgical manufacture.

In the many cases which I have used the various articles mentioned in your catalogue, I am glad to say they have given general satisfaction, and admirably suited the purpose for which they were designed. Among those recommended by me I may mention trusses, spinal supporters for the treatment of curvature, abdominal supporters, laced stockings, splints for fractures, club-foot apparatus, and artificial limbs; and as a Baltimorean I feel proud to say, that we need not go beyond the confines of our own city to obtain a supply of any of the various apparatus so essential to the successful management of surgical cases.

On one occasion it became necessary to apply to you for an artificial leg for a friend from Tennessee, who had been supplied with one, at an enormous expense, from Philadelphia, which was worse than useless, proving, as it did, a constant source of irritation and pain, which prevented its use for weeks at a time, whilst *yours was worn afterwards without the slightest inconvenience.*

There is a versatality of genius indispensible in the proper construction of the various appliances which the peculiarity of the cases may suggest, and

without a desire to over-rate your abilities, I am glad to say, that I have found you quick to perceive and prompt to execute. Furthermore, it will be my pleasure, at all times when an unfortunate necessity demands it, to give you the preference in the manufacture of any apparatus that I may require.

Very truly, your Friend,
WM. H. BALTZELL, A. M., M. D.

To Mr. Robert Bruce, Lombard Street, Balt.

Baltimore, 1*st Month*, 27, 1854.

To Robert Bruce.

Esteemed Friend:—It gives me pleasure to add my testimony to that of many others, to thy skill and promptness in adapting various surgical apparatus and instruments to the object they are designed to effect.

Having frequently had occasion to profit by thy assistance and ability in contriving and manufacturing in the several branches of thy business, I recommend thee to others as fully worthy of their patronage and confidence.

Respectfully,
RICHD. H. THOMAS, M. D.,
Professor Obstet., University of Maryland.

Baltimore, *Nov.* 27*th*, 1854.

Dear Sir:—Having had frequent occasion to make use of the trusses and bandages made by you, and being satisfied with the results obtained, I can with confidence recommend you to those who may require the articles manufactured by you. I consider you as very proficient in your art, and possessing the intelligence and mechanical skill necessary to execute any apparatus that may be required

by the surgeon in the treatment of the various diseases to which the human frame is liable.

Yours truly, H. CHATHARD, M.D.

To Mr. Robert Bruce, No. 145 Lombard Street.

Baltimore, *November 8th*, 1854.

Mr. Robert Bruce.

Dear Sir:—Having, for a number of years, applied many surgical contrivances manufactured by you, especially those adapted to meet the different varieties of hernia, spiral curvatures, and other deformities of the body, I have invariably found them ingeniously constructed, and admirably adapted to meet the wants of the sufferers.

Respectfully, JOHN S. MONKUR, M.D.

Baltimore, *November 10th*, 1854.

Mr. Robert Bruce.

Dear Sir:—It gives me great pleasure to be able to state that the trusses and the abdominal supporters of your manufacture, which I had frequent occasion to employ in my practice, have invariably given the greatest satisfaction, and would therefore recommend your establishment to the patronage of the suffering commmunity.

Yours respectfully,

ABRAM. B. ARNOLD, M.D.

Baltimore, *Nov. 9th*, 1854.

Mr. Robert Bruce has made suspensory bandages in so superior a manner for cases under my care, that I have great pleasure in recommending his work to surgeons and others, who may need articles manufactured by him.

JOHN FONERDEN, M.D.,

Medical Superintendent Md. Hospital for the Insane.

BALTIMORE, *Nov. 20th*, 1854.

SIR:—I have met with but few cases of hernia in my practice but have uniformily succeeded in their treatment, by the aid of your tact in adapting the means indicated.

Respectfully,
DAVID STEWART, M.D.,
79 N. Eutaw Street.

BALTIMORE, 16*th Nov.*, 1854.

MR. ROBERT BRUCE.

SIR:—You inform me that you are about to issue an advertisement of your establishment and apparatus, and request me to give you an expression of the manner in which my orders for surgical appliances have been filled. I can say, briefly and cheerfully, that, in my judgment, you have displayed much aptness in adapting means to the results to be obtained, and have furnished most excellent instruments. Several cases of club feet and other deformities have been cured, without any operation, by apparatus which was made at your establishment.

Respectfully,
WM. M. KEMP.

PRINCE GEORGE COUNTY, MD., *Nov.* 20, 1854.

DEAR SIR;—Below I append a recommendatory notice of your artificial leg. You can make what use of it you think proper.

Very respectfully yours,
J. H. BAYNE.

MR. BRUCE:—It affords me pleasure to add my testimony in favor of your artificial leg. I have examined its mechanism particularly, and think it exhibits great superiority for simplicity and dura-

bility. Its imitation of the natural leg is admirable. It has been used by several of my patients with great satisfaction.

JOHN M. BAYNE, M.D.

BALTIMORE, *November* 23*rd*, 1854.

DEAR SIR:—It gives me great pleasure to recommend you as a careful and efficient manufacturer of instruments for the relief of natural imperfections, distortions, or the result of injuries.

The reputation which your diligent exertions in this branch has already given you is worthy of continued and increased patronage, and I am sure will result in the satisfaction and relief of those who are suffering.

Yours truly, &c.,

W. CHEW VAN BIBBER, M.D.

Robert Bruce, Lombard Street.

BALTIMORE, *Nov.* 25*th*, 1854.

I have often had occasion to procure from Mr. Bruce apparatus for deformed feet, trusses, and other mechanical means employed in surgery. The articles which he has furnished have been ingeniously made and well adapted. I cheerfully recommend his work to surgeons and others who may require it.

N. R. SMITH, M.D.,

Professor of Surgery, University of Md.

BALTIMORE, *November* 28*th*, 1854.

MR. ROBERT BRUCE,

DEAR SIR:—Allow me to state for the information of those that may be afflicted, that I have used your truss for more than twenty years past, with very general satisfaction. Those that have had

occasion to use them have given them their decided preference over others, and many have been radically cured.

Respectfully yours,
JOHN WHITRIDGE.

BALTIMORE, *Nov.* 30*th*, 1854.

I have had frequent occasions to recommend the use of the surgical apparatus made by Mr. Robert Bruce, of this city, and it gives me much pleasure to say, that I have invariably found it admirably adapted for the accomplishment of the objects designed. With extraordinary mechanical skill Mr. Bruce unites an amount of useful and practical knowledge rarely possessed by a man in his vocation.

ROBT. FULTON, M.D.,
53 Sharp Street.

BALTIMORE, *Nov.* 30*th*, 1854.

Mr. Bruce has long and favorably been known to the medical profession of Baltimore as a skillful manufacturer of artificial legs, trusses, mechanical contrivances for curvature of the spine, for the cure of club feet and other physical deformities.

It gives me much pleasure to add my testimony to his high qualifications as to ingenuity, skill and judgment.

FELIX JENKINS, M.D.,
Late Resident Physician, Baltimore Infirmary.

BALTIMORE, *Nov.* 30*th*, 1854.

MR. ROBERT BRUCE.

SIR:—For some years past I have had occasion to apply to you myself and directing others who have required trusses, bandages, suspendors, and instruments for deformities of the feet, &c., also diseases

of the spine and hip, which have succeeded in affording the greatest possible relief, and entire satisfaction to my patients, I shall with pleasure continue recommending those who consult me in cases of a similar nature. I am, Sir, respectfully,

Your obdt. servant,
EDWARD BAKER, M.D.

BALTIMORE, *Dec. 1st*, 1854.

I have employed on different occasions apparatus prepared by Mr. Bruce, and have always found them well made and efficient, fulfilling the purpose for which they were intended.

G. W. MILTENBERGER, M.D.

BALTIMORE, *Dec. 4th*, 1854.

MR. ROBT. BRUCE,

SIR:—In answer to your request it gives me pleasure to say, that you have, on many occasions, worked for me, and that I have been uniformily satisfied with what you have done. I have no hesitation in recommending you as an ingenious and faithful artizan. J. BUCKLER.

BALTIMORE, *Dec. 5th*, 1854.

I have seen several of Mr. Bruce's appliances for the relief of hernia, curved spine, varicous veins, club feet, and other affections requiring mechanical aids, all of which he skillfully adapts to each individual case.

He ought to be more generally known and patronized, especially by surgeons, who are often consulted by patients who might be relieved by well adjusted mechanical means.

E. C. BALDWIN, M.D.,
41 N. Eutaw Street.

BALTIMORE, *Dec. 5th*, 1854.

I have known Mr. Robert Bruce personally and as a surgical support maker many years, and have often had occasion to avail myself of his great knowledge of this business and practical skill, much to the benefit of those who required the aid of such apparatus. He was trained in one of the best institutions of the kind in Scotland, and he shows by his work that he is well qualified in every branch of his business to do justice to those who may apply to him, and relieve suffering humanity.

JOHN W. DUNBAR.

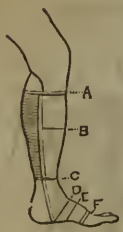
EXTRACT from the REPORT of the JUDGES, CLASS 38.

DENTISTRY, DENTAL AND SURGICAL INSTRUMENTS.

The case deposited by Robert Bruce contains a number of articles of great value to suffering humanity, and of inestimable service in the practice of surgery, and we recommend the skill displayed in the workmanship and to the adaptation to the ends for which they were formed, as worthy of peculiar commendation, and as such articles have few devoted to their manufacture, and with such skill in their production, we therefore place them as the first of their class, and as such commend them to the attention of the Judges; but we deem it just to a worthy and competent artificer to draw special attention to the Artificial Leg contained in the case, as deserving of great commendation, and the more worthy of encouragement as he is the only manufacturer of the article south of Philadelphia.

C. A. HARRIS, M. D.,
JOHN W. DUNBAR, M. D.,
H. W. BAXLEY, M. D.,
W. CHEW VAN BIBBER, M. D.,
SAMUEL JACKSON.

LACE STOCKING.



ARTIFICIAL HAND.

ARTIFICIAL LEG.

LACE KNEE CAP

STEEL SUPPORTER.

SPRING CRUTCH.

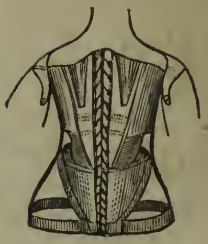
CLUB FOOT BANDAGES.

STEEL STAYS.

(BACK.)

STEEL STAYS.

(FRONT.)



HŒMORRHOID TRUSS.

UMBILICAL TRUSS.

SINGLE TRUSS.

DOUBLE TRUSS.

ABDOMINAL TRUSS.

RUPTURE TRUSS,

SPINE STAYS,

BANDAGE AND ARTIFICIAL

Limb Making, &c. &c.

ROBERT BRUCE,

No. 145 LOMBARD STREET,

BALTIMORE.

Begs leave respectfully to return his sincere thanks for the liberal patronage which has been extended to him. From the great increase in his business it is evident that the principle upon which it is conducted meets with the approbation of the

MEDICAL PROFESSION,

and the public generally. Every article emanating from his establishment is made under his direct auspices, constructed and applied to suit perfectly. Persons getting

TRUSSES OR BANDAGES,

will be attended for One Year, so that a proper adjustment may with more certainty be always maintained. This system has been approved of by his numerous customers, and is generally followed up.

☞ ORDERS PROMPTLY ATTENDED TO. ☜